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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,934	12/03/2003	In Hee Han	K-0588	4486
34610	7590	10/28/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			PRICE, CARL D	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,934	Applicant(s) HAN ET AL.	
	Examiner CARL D. PRICE	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8, 9 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 7 and 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on application P2002-0077009 filed in **Korea** on **12/05/2002**.

Drawings

Figure 1-3 should be designated by a legend such as **--Prior Art--** because only that which is old is illustrated (See pages 1-4 of applicant's specification which describes Figures 1-3 as illustrating "a related art dryer" and "a related art gas burner for a dryer"). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled **"Replacement Sheet"** in the **page header** (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 15, 48: Rejected under 35 U.S.C. 112, second paragraph

Claims 5, 15 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "said at least one outer wing". There is insufficient antecedent basis for this limitation in the claim.

In regard to claim 15, the phrase "inclined at a predetermined angle upward" references a relative orientation of the burner with regard to the manner in which it is used and therefore renders the claim indefinite.

Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 2, 14, 15, 16 and 17: Rejected under 35 U.S.C. 102(b)

Claims 1, 2, 14, 15, 16 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **US002905235 (Dolby)** or **US006190163B1 (MARICIC ET AL)**.

In the claims the term “laundry dryer” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the claims the recitation “laundry dryer”, and “inclined at a predetermined angle upward” (claim 15) are deemed recitations of the intended use. A recitation of the intended use a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

US002905235 (Dolby) shows a means for supplying gas including a gas nozzle (22), mixing pipe (12), primary air inlet (36) and a flame holder disposed at the outlet of the mixing pipe for separating the gas-air mixture into plural streams (46, 52, 54). Regarding claims 2, albeit not shown or discussed, in order to ignite the flame of the **US002905235 (Dolby)** burner an igniter would necessarily be “disposed adjacent the outlet of the mixing pipe”, at least during ignition of the fuel-air mixture. Similarly, regarding claim 17, the fuel supply line of **US002905235 (Dolby)** would by necessity have associated therewith a valve for controlling the gas flow, at least in a manner to permit and prevent gas flow during, for example, maintenance

and installation of the burner. Therefore, while not shown, **US002905235 (Dolby)** would either necessarily include an igniter and/or gas control valve, or it would have been obvious to a person having ordinary skill in the art that **US002905235 (Dolby)** would necessarily include an igniter and/or gas control valve for the reasons set forth herein above.

US006190163B1 (MARICIC ET AL) shows a means for supplying gas including a gas nozzle (not shown), mixing pipe (18), primary air inlet (38) and an igniter (110) and flame holder (50) disposed at the outlet of the mixing pipe for separating the gas-air mixture into plural streams (not shown). Regarding claim 17, the fuel supply line of **US006190163B1 (MARICIC ET AL)** would by necessity have associated therewith a valve for controlling the gas flow, at least in a manner to permit and prevent gas flow during, for example, maintenance and installation of the burner. Therefore, while not shown, **US006190163B1 (MARICIC ET AL)** would necessarily include a gas control valve, or it would have been obvious to a person having ordinary skill in the art that **US002905235 (Dolby)** would necessarily include a gas control valve for the reasons set forth herein above.

Claim 1-3, 8, 9, 14- 17: Rejected under 35 U.S.C. 102(b)

Claims 1-3, 8, 9 and 14-17 are rejected under 35 U.S.C. 102(b) as anticipated by **US005433602 (Sigler)**.

US005433602 (Sigler) shows a means for supplying gas including a gas nozzle (55), mixing pipe (21), primary air inlet (56) and a flame holder (20B; figure 9) disposed at the outlet of the mixing pipe for separating the gas-air mixture into plural streams. In regard to claim 3, **US005433602 (Sigler)** also shows an annular hub having a center flame hole (50A, 50B) and a plurality of outer flame holes (53A, 53B) formed at a predetermined interval around the center flame hole; and a plurality of outer wings (84), radiating from said annular hub, at intervals corresponding to the interval of the outer flame holes of said annular hub. Regarding claims 2, albeit not shown or discussed, in order to ignite the flame of the **US005433602 (Sigler)** burner an igniter would necessarily be “disposed adjacent the outlet of the mixing pipe”, at least during

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ignition of the fuel-air mixture. Similarly, regarding claim 17, the fuel supply line of **US005433602 (Sigler)** would by necessity have associated therewith a valve for controlling the gas flow, at least in a manner to permit and prevent gas flow during, for example, maintenance and installation of the burner. Therefore, while not shown, **US005433602 (Sigler)** would either necessarily include an igniter and/or gas control valve, or it would have been obvious to a person having ordinary skill in the art that **US005433602 (Sigler)** would necessarily include an igniter and/or gas control valve for the reasons set forth herein above.

Allowable Subject Matter

Claims 4, 6, 7 and 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

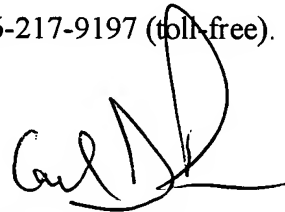
See the attached PTO FORM 892 for prior art made of record and not relied upon and which are considered pertinent to applicant's disclosure.

USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Carl D. Price', with a large, stylized loop at the end.

CARL D. PRICE
Primary Examiner
Art Unit 3749

cp